WHAT IS CLAIMED IS:

1. A composition for durable conditioning of at least one keratinous fiber comprising:

(a) at least one compound comprising at least two quaternary ammonium groups; and

(b) at least one sugar chosen from C_3 to C_5 monosaccharides substituted with at least one C_1 to C_{22} carbon chain,

wherein said at least one compound and at least one sugar are present in an amount effective to durably condition said at least one keratinous fiber.

2. A composition according to claim 1, wherein said at least two quaternary ammonium groups, which may be identical or different, are each chosen from ammonium groups which are quaternized and amine groups which are capable of being quaternized.

3. A composition according to claim 2, wherein said amine groups which are capable of being quaternized are chosen from primary amine groups, secondary amine groups, and tertiary amine groups.

4. A composition according to claim 1, wherein said at least two quaternary ammonium groups, which may be identical or different, are each chosen from substituent ammonium groups which are quaternized, substituent amino groups capable of being quaternized, ammonium groups which are quaternized which form part

of the skeleton of said at least one compound and amino groups capable of being quaternized which form part of the skeleton of said at least one compound.

5. A composition according to claim 1, wherein said at least one compound comprising at least two quaternary ammonium groups is chosen from:

- polymers comprising at least two quaternary ammonium groups derived from (i) at least one monomer unit comprising at least two quaternary ammonium groups as defined below and optionally (ii) at least one additional monomer unit different from said at least one monomer (i); and

- polymers comprising at least two quaternary ammonium groups derived from (i) at least one monomer comprising at least one quaternary ammonium group as defined herein and optionally (ii) at least one additional monomer unit.

6. A composition according to claim 5, wherein said at least one compound comprising at least two quaternary ammonium groups is chosen from:

- polymers comprising at least two quaternary ammonium groups derived from at least one vinyl monomer;

- cationic diallyl quaternary ammonium polymers comprising at least two quaternary ammonium groups;

- derivatives of polysaccharide polymers comprising at least two quaternary ammonium groups; and

- silicone polymers comprising at least two quaternary ammonium groups.

7. A composition according to claim 6, wherein said at least one compound

comprising at least two quaternary ammonium groups is chosen from:

- polymers comprising at least two quaternary ammonium groups derived from at least one vinyl monomer substituted with at least one group chosen from dialkylaminoalkyl acrylate, dialkylaminoalkyl methacrylate, monoalkylaminoalkyl acrylate, monoalkylaminoalkyl methacrylate, trialkyl methacryloxyalkyl ammonium salts, trialkyl acryloxyalkyl ammonium salts and diallyl quaternary ammonium salts;

- polymers comprising at least two quaternary ammonium groups derived from at least one vinyl quaternary ammonium monomer comprising at least one cyclic cationic nitrogen-containing ring;

- copolymers comprising at least two quaternary ammonium groups derived from (i) at least one vinyl monomer comprising at least one quaternary ammonium group and (ii) at least one additional monomer chosen from acrylamide, methacrylamide, alkyl acrylamides, dialkyl acrylamides, alkyl methacrylamides, dialkyl methacrylamides, alkyl acrylate, alkyl methacrylate, vinyl caprolactone, vinyl pyrrolidone, vinyl esters, vinyl alcohol, maleic anhydride, propylene glycol, and ethylene glycol;

- cationic cellulose comprising at least two quaternary ammonium groups;

- cationic starch derivatives comprising at least two quaternary ammonium groups;

- cationic guar gum derivatives comprising at least two quaternary ammonium groups; and

- cellulose ethers comprising at least two quaternary ammonium groups.

8. A composition according to claim 7, wherein said at least one compound comprising at least two quaternary ammonium groups is chosen from polyquaternium-16; polyquaternium-11; quaternized poly(vinylamine); quaternized poly-4-vinyl pyridine; quaternized poly(ethyleneimine); polyquaternium-6; polyquaternium-7; polyquaternium-22; polyquaternium-39; polyquaternium-10; polyquaternium-24; quaternized starch; and amodimethicone.

9. A composition according to claim 7, wherein said at least one compound comprising at least two quaternary ammonium groups is polyquaternium-10.

10. A composition according to claim 7, wherein said at least one compound comprising at least two quaternary ammonium groups is polyquaternium-22.

11. A composition according to claim 7, wherein said at least one compound comprising at least two quaternary ammonium groups is poly(ethyleneimine).

12. A composition according to claim 7, wherein said at least one compound comprising at least two quaternary ammonium groups is quaternized starch.

13. A composition according to claim 1, wherein said at least one compound comprising at least two quaternary ammonium groups further comprises at least one counterion.

14. A composition according to claim 1, wherein said at least one compound comprising at least two quaternary ammonium groups is present in an amount ranging from 0.01% to 10% by weight relative to the total weight of the composition.

15. A composition according to claim 14, wherein said at least one compound

comprising at least two quaternary ammonium groups is present in an amount ranging from 0.1% to 5% by weight relative to the total weight of the composition.

16. A composition according to claim 1, wherein said C_3 to C_5 monosaccharides are chosen from pentoses.

17. A composition according to claim 1, wherein said pentoses are chosen from aldopentoses and ketopentoses.

18. A composition according to claim 17, wherein said aldopentoses are chosen from xylose, arabinose, lyxose, and ribose.

19. A composition according to claim 17, wherein said ketopentoses are chosen from ribulose and xylulose.

20. A composition according to claim 1, wherein said C_3 to C_5 monosaccharides are chosen from tetroses.

21. A composition according to claim 20, wherein said tetroses are chosen from aldotetroses and ketotetroses.

22. A composition according to claim 21, wherein said aldotetroses are chosen from erythrose and treose.

23. A composition according to claim 21, wherein said aldotetroses are chosen from erythrulose.

24. A composition according to claim 1, wherein said C_3 to C_5 monosaccharides are chosen from trioses.

25. A composition according to claim 24, wherein said trioses are chosen from aldotrioses and ketotrioses.

26. A composition according to claim 25, wherein said trioses are chosen from glyceraldehyde.

27. A composition according to claim 25, wherein said trioses are chosen from dihydroxyacetone.

28. A composition according to claim 1, wherein said C_3 to C_5 monosaccharides are chosen from furanoses and derivatives thereof.

29. A composition according to claim 1, wherein said C_3 to C_5 monosaccharides are chosen from derivatives of C_3 to C_5 monosaccharides.

30. A composition according to claim 29, wherein said derivatives of C_3 to C_5 monosaccharides are chosen from imine derivatives of C_3 to C_5 monosaccharides, hemiacetal derivatives of C_3 to C_5 monosaccharides, hemiketal derivatives of C_3 to C_5 monosaccharides, and oxidized derivatives of C_3 to C_5 monosaccharides.

31. A composition according to claim 29, wherein said derivatives of C_3 to C_5 monosaccharides are chosen from oligosaccharides derived from C_3 to C_5 monosaccharides.

32. A composition according to claim 31, wherein said oligosaccharides derived from C_3 to C_5 monosaccharides are chosen from xylobiose.

33. A composition according to claim 1, wherein said at least one C_1 to C_{22}

carbon chain is chosen from linear, branched and cyclic C_1 to C_{22} carbon chains, which are saturated or unsaturated.

34. A composition according to claim 1, wherein said at least one C_1 to C_{22} carbon chain is substituted.

35. A composition according to claim 1, wherein said at least one C_1 to C_{22} carbon chain is chosen from C_{16} to C_{18} carbon chains.

36. A composition according to claim 1, wherein said at least one C_1 to C_{22} carbon chain is chosen from C_{16} carbon chains and C_{18} carbon chains.

37. A composition according to claim 36, wherein said C_{16} carbon chains are linear hexadecyl chains.

38. A composition according to claim 36, wherein said C_{18} carbon chains are linear octadecyl chains.

39. A composition according to claim 1, wherein said at least one sugar is substituted with said at least one C_1 to C_{22} carbon chain at the C1 position of said at least one sugar.

40. A composition according to claim 1, wherein said at least one sugar is substituted with said at least one C_1 to C_{22} carbon chain at at least one of the hydroxyl groups of said at least one sugar.

41. A composition according to claim 1, wherein said at least one sugar is present in said composition in an amount ranging from 0.01% to 10% by weight relative to the total weight of the composition.

42. A composition according to claim 41, wherein said at least one sugar is present in said composition in an amount ranging from 0.1% to 5% by weight relative to the total weight of the composition.

43. A composition according to claim 1, wherein said composition further comprises at least one additional sugar different from said at least one sugar chosen from C_3 to C_5 monosaccharides substituted with at least one C_1 to C_{22} carbon chain.

44. A composition according to claim 43, wherein said at least one additional sugar is chosen from monosaccharides, oligosaccharides, and polysaccharides.

45. A composition according to claim 44, wherein said monosaccharides are chosen from hexoses.

46. A composition according to claim 45, wherein said hexoses are chosen from allose, altrose, glucose, mannose, gulose, idose, galactose, talose, sorbose, psicose, fructose, and tagatose.

47. A composition according to claim 43, wherein said at least one additional sugar is substituted with at least one C_1 to C_{22} carbon chain.

48. A composition according to claim 47, wherein said at least one C_1 to C_{22} carbon chain is chosen from linear, branched and cyclic C_1 to C_{22} carbon chains, which are saturated or unsaturated.

49. A composition according to claim 48, wherein said at least one C_1 to C_{22} carbon chain is chosen from C_{16} to C_{18} carbon chains.

50. A composition according to claim 49, wherein said at least one C_1 to C_{22}

carbon chain is chosen from C_{16} carbon chains and C_{18} carbon chains.

51. A composition according to claim 50, wherein said C_{16} carbon chains are linear hexadecyl chains.

52. A composition according to claim 50, wherein said C_{18} carbon chains are linear octadecyl chains.

53. A composition according to claim 47, wherein said at least one additional sugar is substituted with said at least one C_1 to C_{22} carbon chain at the C1 position of said at least one additional sugar.

54. A composition according to claim 43, wherein said at least one additional sugar is present in said composition in an amount ranging from 0.01% to 10% by weight relative to the total weight of the composition.

55. A composition according to claim 54, wherein said at least one additional sugar is present in said composition in an amount ranging from 0.1% to 5% by weight relative to the total weight of the composition.

56. A composition according to claim 1, wherein said composition is in the form of a liquid, oil, paste, stick, dispersion, emulsion, lotion, gel, or cream.

57. A composition according to claim 1, wherein said at least one keratinous fiber is hair.

58. A composition according to claim 1, further comprising at least one suitable additive chosen from anionic surfactants, cationic surfactants, nonionic surfactants, amphoteric surfactants, fragrances, penetrating agents, antioxidants,

sequestering agents, opacifying agents, solubilizing agents, emollients, colorants, screening agents, preserving agents, proteins, vitamins, silicones, polymers, plant oils, mineral oils, and synthetic oils.

59. A composition according to claim 1, wherein said composition is heat-activated.

60. A method for caring for or treating at least one keratinous fiber comprising:

applying to said at least one keratinous fiber a composition comprising:

(a) at least one compound comprising at least two quaternary ammonium groups; and

(b) at least one sugar chosen from C_3 to C_5 monosaccharides substituted with at least one C_1 to C_{22} carbon chain; and

heating said at least one keratinous fiber,

wherein said at least one compound and at least one sugar are present in an amount effective to care for or treat said at least one keratinous fiber, and

further wherein said composition is applied prior to or during said heating.

61. A method according to claim 60, further comprising wetting said at least one keratinous fiber with water prior to said application.

62. A method according to claim 60, further comprising shampooing said at least one keratinous fiber subsequent to said heating.

63. A method according to claim 62, further comprising rinsing said at least one keratinous fiber subsequent to said shampooing.

64. A method according to claim 60, wherein said at least two quaternary ammonium groups, which may be identical or different, are each chosen from ammonium groups which are quaternized and amine groups which are capable of being quaternized.

65. A method according to claim 64, wherein said amine groups which are capable of being quaternized are chosen from primary amine groups, secondary amine groups, and tertiary amine groups.

66. A method according to claim 60, wherein said at least two quaternary ammonium groups, which may be identical or different, are each chosen from substituent ammonium groups which are quaternized, substituent amino groups capable of being quaternized, ammonium groups which are quaternized which form part of the skeleton of said at least one compound and amino groups capable of being quaternized which form part of the skeleton of said at least one compound.

67. A method according to claim 60, wherein said at least one compound comprising at least two quaternary ammonium groups is chosen from:

- polymers comprising at least two quaternary ammonium groups derived from (i) at least one monomer unit comprising at least two quaternary ammonium groups as defined below and optionally (ii) at least one additional monomer unit different from said at least one monomer (i); and

- polymers comprising at least two quaternary ammonium groups derived from (i) at least one monomer comprising at least one quaternary ammonium group as defined herein and optionally (ii) at least one additional monomer unit.

68. A method according to claim 67, wherein said at least one compound comprising at least two quaternary ammonium groups is chosen from:

- polymers comprising at least two quaternary ammonium groups derived from at least one vinyl monomer;

- cationic diallyl quaternary ammonium polymers comprising at least two quaternary ammonium groups;

- derivatives of polysaccharide polymers comprising at least two quaternary ammonium groups; and

- silicone polymers comprising at least two quaternary ammonium groups.

69. A method according to claim 68, wherein said at least one compound comprising at least two quaternary ammonium groups is chosen from:

- polymers comprising at least two quaternary ammonium groups derived from at least one vinyl monomer substituted with at least one group chosen from dialkylaminoalkyl acrylate, dialkylaminoalkyl methacrylate, monoalkylaminoalkyl acrylate, monoalkylaminoalkyl methacrylate, trialkyl methacryloxyalkyl ammonium salts, trialkyl acryloxyalkyl ammonium salts and diallyl quaternary ammonium salts;

- polymers comprising at least two quaternary ammonium groups derived from at least one vinyl quaternary ammonium monomer comprising at least one cyclic cationic nitrogen-containing ring;

- copolymers comprising at least two quaternary ammonium groups derived from (i) at least one vinyl monomer comprising at least one quaternary ammonium group and (ii) at least one additional monomer chosen from acrylamide, methacrylamide, alkyl acrylamides, dialkyl acrylamides, alkyl methacrylamides, dialkyl methacrylamides, alkyl acrylate, alkyl methacrylate, vinyl caprolactone, vinyl pyrrolidone, vinyl esters, vinyl alcohol, maleic anhydride, propylene glycol, and ethylene glycol;

- cationic cellulose comprising at least two quaternary ammonium groups;

- cationic starch derivatives comprising at least two quaternary ammonium groups;

- cationic guar gum derivatives comprising at least two quaternary ammonium groups; and

- cellulose ethers comprising at least two quaternary ammonium groups.

70. A method according to claim 69, wherein said at least one compound comprising at least two quaternary ammonium groups is chosen from polyquaternium-16; polyquaternium-11; quaternized poly(vinylamine); quaternized poly-4-vinyl pyridine; quaternized poly(ethyleneimine); polyquaternium-6; polyquaternium-7; polyquaternium-22; polyquaternium-39; polyquaternium-10; polyquaternium-24; quaternized starch; and amodimethicone.

71. A method according to claim 69, wherein said at least one compound comprising at least two quaternary ammonium groups is polyquaternium-10.

72. A method according to claim 69, wherein said at least one compound comprising at least two quaternary ammonium groups is polyquaternium-22.

73. A method according to claim 69, wherein said at least one compound comprising at least two quaternary ammonium groups is poly(ethyleneimine).

74. A method according to claim 69, wherein said at least one compound comprising at least two quaternary ammonium groups is quaternized starch.

75. A method according to claim 60, wherein said at least one compound comprising at least two quaternary ammonium groups further comprises at least one counterion.

76. A method according to claim 60, wherein said at least one compound comprising at least two quaternary ammonium groups is present in an amount ranging from 0.01% to 10% by weight relative to the total weight of the composition.

77. A method according to claim 76, wherein said at least one compound comprising at least two quaternary ammonium groups is present in an amount ranging from 0.1% to 5% by weight relative to the total weight of the composition.

78. A method according to claim 60, wherein said C_3 to C_5 monosaccharides are chosen from pentoses.

79. A method according to claim 78, wherein said pentoses are chosen from aldopentoses and ketopentoses.

80. A method according to claim 79, wherein said aldopentoses are chosen from xylose, arabinose, lyxose, and ribose.

81. A method according to claim 79, wherein said ketopentoses are chosen from ribulose and xylulose.

82. A method according to claim 60, wherein said C_3 to C_5 monosaccharides are chosen from tetroses.

83. A method according to claim 82, wherein said tetroses are chosen from aldotetroses and ketotetroses.

84. A method according to claim 83, wherein said aldotetroses are chosen from erythrose and treose.

85. A method according to claim 83, wherein said aldotetroses are chosen from erythrulose.

86. A method according to claim 60, wherein said C_3 to C_5 monosaccharides are chosen from trioses.

87. A method according to claim 86, wherein said trioses are chosen from aldotrioses and ketotrioses.

88. A method according to claim 87, wherein said trioses are chosen from glyceraldehyde.

89. A method according to claim 87, wherein said trioses are chosen from dihydroxyacetone.

90. A method according to claim 60, wherein said C_3 to C_5 monosaccharides are chosen from furanoses and derivatives thereof.

91. A method according to claim 60, wherein said C_3 to C_5 monosaccharides are chosen from derivatives of C_3 to C_5 monosaccharides.

92. A method according to claim 90, wherein said derivatives of C_3 to C_5 monosaccharides are chosen from imine derivatives of C_3 to C_5 monosaccharides, hemiacetal derivatives of C_3 to C_5 monosaccharides, hemiketal derivatives of C_3 to C_5 monosaccharides, and oxidized derivatives of C_3 to C_5 monosaccharides.

93. A method according to claim 90, wherein said derivatives of C_3 to C_5 monosaccharides are chosen from oligosaccharides derived from said C_3 to C_5 monosaccharides.

94. A method according to claim 93, wherein said oligosaccharides derived from said C_3 to C_5 monosaccharides are chosen from xylobiose.

95. A method according to claim 60, wherein said at least one C_1 to C_{22} carbon chain is chosen from linear, branched and cyclic C_1 to C_{22} carbon chains, which are saturated or unsaturated.

96. A method according to claim 60, wherein said at least one C_1 to C_{22} carbon chain is substituted.

97. A method according to claim 60, wherein said at least one C_1 to C_{22} carbon chain is chosen from C_{16} to C_{18} carbon chains.

98. A method according to claim 60, wherein said at least one C_1 to C_{22}

carbon chain is chosen from C_{16} carbon chains and C_{18} carbon chains.

99. A method according to claim 98, wherein said C_{16} carbon chains are linear hexadecyl chains.

100. A method according to claim 98, wherein said C_{18} carbon chains are linear octadecyl chains.

101. A method according to claim 60, wherein said at least one sugar is substituted with said at least one C_1 to C_{22} carbon chain at the C1 position of said at least one sugar.

102. A method according to claim 60, wherein said at least one sugar is substituted with said at least one C_1 to C_{22} carbon chain at at least one of the hydroxyl groups of said at least one sugar.

103. A method according to claim 60, wherein said at least one sugar is present in said composition in an amount ranging from 0.01% to 10% by weight relative to the total weight of the composition.

104. A method according to claim 103, wherein said at least one sugar is present in said composition in an amount ranging from 0.1% to 5% by weight relative to the total weight of the composition.

105. A method according to claim 60, wherein said composition further comprises at least one additional sugar different from said at least one sugar chosen from C_3 to C_5 monosaccharides substituted with at least one C_1 to C_{22} carbon chain.

106. A method according to claim 105, wherein said at least one additional sugar is chosen from monosaccharides, oligosaccharides and polysaccharides.

107. A method according to claim 106, wherein said monosaccharides are chosen from hexoses.

108. A method according to claim 107, wherein said hexoses are chosen from allose, altrose, glucose, mannose, gulose, idose, galactose, talose, sorbose, psicose, fructose, and tagatose.

109. A method according to claim 105, wherein said at least one additional sugar is substituted with at least one C_1 to C_{22} carbon chain.

110. A method according to claim 109, wherein said at least one C_1 to C_{22} carbon chain is chosen from linear, branched and cyclic C_1 to C_{22} carbon chains, which are saturated or unsaturated.

111. A method according to claim 110, wherein said at least one C_1 to C_{22} carbon chain is chosen from C_{16} to C_{18} carbon chains.

112. A method according to claim 110, wherein said at least one C_1 to C_{22} carbon chain is chosen from C_{16} carbon chains and C_{18} carbon chains.

113. A method according to claim 112, wherein said C_{16} carbon chains are linear hexadecyl chains.

114. A method according to claim 112, wherein said C_{18} carbon chains are linear octadecyl chains.

115. A method according to claim 109, wherein said at least one additional sugar is substituted with said at least one C_1 to C_{22} carbon chain at the C1 position of said at least one additional sugar.

116. A method according to claim 105, wherein said at least one additional sugar is present in said composition in an amount ranging from 0.01% to 10% by weight relative to the total weight of the composition.

117. A method according to claim 116, wherein said at least one additional sugar is present in said composition in an amount ranging from 0.1% to 5% by weight relative to the total weight of the composition.

118. A method according to claim 60, wherein said composition is in the form of a liquid, oil, paste, stick, dispersion, emulsion, lotion, gel, or cream.

119. A method according to claim 60, wherein said at least one keratinous fiber is hair.

120. A method according to claim 60, further comprising at least one suitable additive chosen from anionic surfactants, cationic surfactants, nonionic surfactants, amphoteric surfactants, fragrances, penetrating agents, antioxidants, sequestering agents, opacifying agents, solubilizing agents, emollients, colorants, screening agents, preserving agents, proteins, vitamins, silicones, polymers, plant oils, mineral oils, and synthetic oils.

121. A method according to claim 60, wherein said composition is applied prior to and during said heating.

122. A method according to claim 60, wherein said composition cares for and treats at least one keratinous fiber.

123. A method for durably conditioning at least one keratinous fiber comprising:

applying to said at least one keratinous fiber a composition comprising:

(a) at least one compound comprising at least two quaternary ammonium groups; and

(b) at least one sugar chosen from C_3 to C_5 monosaccharides substituted with at least one C_1 to C_{22} carbon chain; and

heating said at least one keratinous fiber,

wherein said at least one compound and at least one sugar are present in an amount effective to durably condition said at least one keratinous fiber, and

further wherein said composition is applied prior to or during said heating.

124. A method according to claim 123, further comprising wetting said at least one keratinous fiber with water prior to said applying.

125. A method according to claim 123, further comprising shampooing said at least one keratinous fiber subsequent to said heating.

126. A method according to claim 125, further comprising rinsing said at least one keratinous fiber subsequent to said shampooing.

127. A method according to claim 123, wherein said at least two quaternary

ammonium groups, which may be identical or different, are each chosen from ammonium groups which are quaternized and amine groups which are capable of being quaternized.

128. A method according to claim 127, wherein said amine groups which are capable of being quaternized are chosen from primary amine groups, secondary amine groups, and tertiary amine groups.

129. A method according to claim 123, wherein said at least two quaternary ammonium groups, which may be identical or different, are each chosen from substituent ammonium groups which are quaternized, substituent amino groups capable of being quaternized, ammonium groups which are quaternized which form part of the skeleton of said at least one compound and amino groups capable of being quaternized which form part of the skeleton of said at least one compound.

130. A method according to claim 123, wherein said at least one compound comprising at least two quaternary ammonium groups is chosen from:

- polymers comprising at least two quaternary ammonium groups derived from (i) at least one monomer unit comprising at least two quaternary ammonium groups as defined below and optionally (ii) at least one additional monomer unit different from said at least one monomer (i); and

- polymers comprising at least two quaternary ammonium groups derived from (i) at least one monomer comprising at least one quaternary ammonium group as defined herein and optionally (ii) at least one additional monomer unit.

131. A method according to claim 130, wherein said at least one compound comprising at least two quaternary ammonium groups is chosen from:

- polymers comprising at least two quaternary ammonium groups derived from at least one vinyl monomer;

- cationic diallyl quaternary ammonium polymers comprising at least two quaternary ammonium groups;

- derivatives of polysaccharide polymers comprising at least two quaternary ammonium groups; and

- silicone polymers comprising at least two quaternary ammonium groups.

132. A method according to claim 131, wherein said at least one compound comprising at least two quaternary ammonium groups is chosen from:

- polymers comprising at least two quaternary ammonium groups derived from at least one vinyl monomer substituted with at least one group chosen from dialkylaminoalkyl acrylate, dialkylaminoalkyl methacrylate, monoalkylaminoalkyl acrylate, monoalkylaminoalkyl methacrylate, trialkyl methacryloxyalkyl ammonium salts, trialkyl acryloxyalkyl ammonium salts and diallyl quaternary ammonium salts;

- polymers comprising at least two quaternary ammonium groups derived from at least one vinyl quaternary ammonium monomer comprising at least one cyclic cationic nitrogen-containing ring;

- copolymers comprising at least two quaternary ammonium groups derived from (i) at least one vinyl monomer comprising at least one quaternary ammonium group and

(ii) at least one additional monomer chosen from acrylamide, methacrylamide, alkyl acrylamides, dialkyl acrylamides, alkyl methacrylamides, dialkyl methacrylamides, alkyl acrylate, alkyl methacrylate, vinyl caprolactone, vinyl pyrrolidone, vinyl esters, vinyl alcohol, maleic anhydride, propylene glycol, and ethylene glycol;

- cationic cellulose comprising at least two quaternary ammonium groups;

- cationic starch derivatives comprising at least two quaternary ammonium groups;

- cationic guar gum derivatives comprising at least two quaternary ammonium groups; and

- cellulose ethers comprising at least two quaternary ammonium groups.

133. A method according to claim 132, wherein said at least one compound comprising at least two quaternary ammonium groups is chosen from polyquaternium-16; polyquaternium-11; quaternized poly(vinylamine); quaternized poly-4-vinyl pyridine; quaternized poly(ethyleneimine); polyquaternium-6; polyquaternium-7; polyquaternium-22; polyquaternium-39; polyquaternium-10; polyquaternium-24; quaternized starch; and amodimethicone.

134. A method according to claim 132, wherein said at least one compound comprising at least two quaternary ammonium groups is polyquaternium-10.

135. A method according to claim 132, wherein said at least one compound comprising at least two quaternary ammonium groups is polyquaternium-22.

136. A method according to claim 132, wherein said at least one compound

comprising at least two quaternary ammonium groups is poly(ethyleneimine).

137. A method according to claim 132, wherein said at least one compound comprising at least two quaternary ammonium groups is quaternized starch.

138. A method according to claim 123, wherein said at least one compound comprising at least two quaternary ammonium groups further comprises at least one counterion.

139. A method according to claim 123, wherein said at least one compound comprising at least two quaternary ammonium groups is present in an amount ranging from 0.01% to 10% by weight relative to the total weight of the composition.

140. A method according to claim 139, wherein said at least one compound comprising at least two quaternary ammonium groups is present in an amount ranging from 0.1% to 5% by weight relative to the total weight of the composition.

141. A method according to claim 123, wherein said C_3 to C_5 monosaccharides are chosen from pentoses.

142. A method according to claim 141, wherein said pentoses are chosen from aldopentoses and ketopentoses.

143. A method according to claim 142, wherein said aldopentoses are chosen from xylose, arabinose, lyxose, and ribose.

144. A method according to claim 142, wherein said ketopentoses are chosen from ribulose and xylulose.

145. A method according to claim 123, wherein said C_3 to C_5 monosaccharides are chosen from tetroses.

146. A method according to claim 145, wherein said tetroses are chosen from aldotetroses and ketotetroses.

147. A method according to claim 146, wherein said aldotetroses are chosen from erythrose and treose.

148. A method according to claim 146, wherein said aldotetroses are chosen from erythrulose.

149. A method according to claim 123, wherein said C_3 to C_5 monosaccharides are chosen from trioses.

150. A method according to claim 149, wherein said trioses are chosen from aldotrioses and ketotrioses.

151. A method according to claim 150, wherein said trioses are chosen from glyceraldehyde.

152. A method according to claim 150, wherein said trioses are chosen from dihydroxyacetone.

153. A method according to claim 123, wherein said C_3 to C_5 monosaccharides are chosen from furanoses and derivatives thereof.

154. A method according to claim 123, wherein said C_3 to C_5 monosaccharides are chosen from derivatives of C_3 to C_5 monosaccharides.

155. A method according to claim 154, wherein said derivatives of C_3 to C_5 monosaccharides are chosen from imine derivatives of C_3 to C_5 monosaccharides, hemiacetal derivatives of C_3 to C_5 monosaccharides, hemiketal derivatives of C_3 to C_5 monosaccharides, and oxidized derivatives of C_3 to C_5 monosaccharides.

156. A method according to claim 154, wherein said derivatives of C_3 to C_5 monosaccharides are chosen from oligosaccharides derived from said C_3 to C_5 monosaccharides.

157. A method according to claim 156, wherein said oligosaccharides derived from said C_3 to C_5 monosaccharides are chosen from xylobiose.

158. A method according to claim 123, wherein said at least one C_1 to C_{22} carbon chain is chosen from linear, branched and cyclic C_1 to C_{22} carbon chains, which are saturated or unsaturated.

159. A method according to claim 123, wherein said at least one C_1 to C_{22} carbon chain is substituted.

160. A method according to claim 123, wherein said at least one C_1 to C_{22} carbon chain is chosen from C_{16} to C_{18} carbon chains.

161. A method according to claim 123, wherein said at least one C_1 to C_{22} carbon chain is chosen from C_{16} carbon chains and C_{18} carbon chains.

162. A method according to claim 161, wherein said C_{16} carbon chains are linear hexadecyl chains.

163. A method according to claim 161, wherein said C_{18} carbon chains are

linear octadecyl chains.

164. A method according to claim 123, wherein said at least one sugar is substituted with said at least one C_1 to C_{22} carbon chain at the C1 position of said at least one sugar.

165. A method according to claim 123, wherein said at least one sugar is substituted with said at least one C_1 to C_{22} carbon chain at at least one of the hydroxyl groups of said at least one sugar.

166. A method according to claim 123, wherein said at least one sugar is present in said composition in an amount ranging from 0.01% to 10% by weight relative to the total weight of the composition.

167. A method according to claim 166, wherein said at least one sugar is present in said composition in an amount ranging from 0.1% to 5% by weight relative to the total weight of the composition.

168. A method according to claim 123, wherein said composition further comprises at least one additional sugar different from said at least one sugar chosen from C_3 to C_5 monosaccharides substituted with at least one C_1 to C_{22} carbon chain.

169. A method according to claim 168, wherein said at least one additional sugar is chosen from monosaccharides, oligosaccharides and polysaccharides.

170. A method according to claim 169, wherein said monosaccharides are chosen from hexoses.

171. A method according to claim 170, wherein said hexoses are chosen

from allose, altrose, glucose, mannose, gulose, idose, galactose, talose, sorbose, psicose, fructose, and tagatose.

172. A method according to claim 168, wherein said at least one additional sugar is substituted with at least one C_1 to C_{22} carbon chain.

173. A method according to claim 172, wherein said at least one C_1 to C_{22} carbon chain is chosen from linear, branched and cyclic C_1 to C_{22} carbon chains, which are saturated or unsaturated.

174. A method according to claim 173, wherein said at least one C_1 to C_{22} carbon chain is chosen from C_{16} to C_{18} carbon chains.

175. A method according to claim 173, wherein said at least one C_1 to C_{22} carbon chain is chosen from C_{16} carbon chains and C_{18} carbon chains.

176. A method according to claim 175, wherein said C_{16} carbon chains are linear hexadecyl chains.

177. A method according to claim 175, wherein said C_{18} carbon chains are linear octadecyl chains.

178. A method according to claim 172, wherein said at least one additional sugar is substituted with said at least one C_1 to C_{22} carbon chain at the C1 position of said at least one additional sugar.

179. A method according to claim 168, wherein said at least one additional sugar is present in said composition in an amount ranging from 0.01% to 10% by weight relative to the total weight of the composition.

180. A method according to claim 179, wherein said at least one additional sugar is present in said composition in an amount ranging from 0.1% to 5% by weight relative to the total weight of the composition.

181. A method according to claim 123, wherein said composition is in the form of a liquid, oil, paste, stick, dispersion, emulsion, lotion, gel, or cream.

182. A method according to claim 123, wherein said at least one keratinous fiber is hair.

183. A method according to claim 123, further comprising at least one suitable additive chosen from anionic surfactants, cationic surfactants, nonionic surfactants, amphoteric surfactants, fragrances, penetrating agents, antioxidants, sequestering agents, opacifying agents, solubilizing agents, emollients, colorants, screening agents, preserving agents, proteins, vitamins, silicones, polymers, plant oils, mineral oils, and synthetic oils.

184. A method according to claim 123, wherein said composition is applied prior to and during said heating.

185. A kit for caring for, treating or durably conditioning at least one keratinous fiber comprising at least two compartments,

wherein a first compartment comprises at least one compound comprising at least two quaternary ammonium groups; and

wherein a second compartment comprises at least one sugar chosen from C_3 to C_5 monosaccharides substituted with at least one C_1 to C_{22} carbon chain.

186. A kit according to claim 185, wherein at least one of said at least two compartments further comprises at least one additional sugar, different from said at least one sugar chosen from C_3 to C_5 monosaccharides substituted with at least one C_1 to C_{22} carbon chain.